

History and selection in the late Pleistocene archaeology of the Western Cape, South Africa

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This thesis examines late Pleistocene changes in stone artefact technologies at five sites in the Western Cape province of South Africa. Previous approaches to late Pleistocene technological change in the region are demonstrated to have been affected by uncritically accepted ideas derived from foundational works. In particular, culture history and cultural evolutionism are shown to have influenced the ways in which archaeological materials have been presented and interpreted. As a consequence of these schools of thought, the nature, causes and significance of technological change in the period under consideration remain poorly understood.

With reference to Dual Inheritance Theory, Optimal Foraging Theory and theory related to the organization of technology, the thesis argues that the technological changes witnessed at the five sites examined reflect a sequence of adaptations to spatial and temporal variation in the distribution of critical resources. These adaptations include variance in population mobility and in the dispersal of individuals and groups across the study area. Data related to mobility and dispersal suggest that at certain points in the late Pleistocene the study area was occupied by at least two distinct groups, with different tendencies in implement manufacture.

Technological variation is found to be a regular facet of the sequences considered, though the intensity of variation appears to increase during periods of major environmental change. Culture-historic units such as the Howiesons Poort and Still Bay are shown to be points in an on-going and fluid process of adaptation. Moreover, these units are shown to be complex and internally variable, rather than discrete and static entities. Arguments to the effect that technological systems such as those represented by the Howiesons Poort and Still Bay are inherently advantageous over other late Pleistocene technologies are inconsistent with the evidence presented. Instead it is suggested that these and other technological systems were subject to regular turnover as part of the adaptive process. In considering these changes, the thesis also provides an explanation for the disappearance of prepared core systems from the study area, and, by extension, for the end of the Middle Stone Age.